

REMARKS

The Applicants wish to thank the Examiner for the review of the present application. Claims 12, 13, 90-92, 98, 99, 101-105, 118-126, 128, 129 and 173 have been amended. Claims 12, 13, 89-99, 101-105, 116-126, 128, 129 and 173 are currently under consideration. No new matter has been added.

Information Disclosure

Applicants respectfully direct the Examiner's attention to co-owned and co-pending U.S. Patent Application Serial No. 12/650,846, currently allowed by Examiner Lu, which includes claims to methods of deriving bone information utilizing, among other things, overlapping windows.

35 U.S.C. §103

Claims 12, 89-91, 93-99, 101-103, 118-119, 128-129 and 173 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,442,287 (Jiang et al., hereinafter "Jiang") in view of U.S. Patent Number 5,915,036 (Grunkin et al.).

Applicants have amended independent claim 12, which now includes the steps of obtaining image data of an anatomical structure, defining a region of interest in the image data, defining within the region of interest at least first and second windows, analyzing information in the first window to determine at least one value for a desired parameter, analyzing information in the second window to determine at least a second value for the parameter, and generating a set of data at least in part from the first and second values. In contrast, Jiang selects two dimensional regions of interest, performs a background correction within the region of interest, performs a fitting technique, and then subtracts the fitted trend from each ROI to yield the trabecular pattern. Jiang then performs a number of calculations in order to determine bone texture characteristics and bone structure.

The office action adds Grunkin, et al. to correct the deficiencies of Jiang. Grunkin, however, also does not teach the method of amended claim 12. Grunkin discloses a method of estimating the bone quality of a vertebra using a two-dimensional image (See Grunkin, col. 3,

lines 25-30). In particular, Grunkin performs at least one of a variety of background correction techniques and manipulates the two-dimensional image to either enhance prominent features or reduce less dominant features (See Grunkin, col. 4, lines 43-54). Grunkin then extracts information about the trabecular structure from the manipulated image and estimates the bone quality (See Grunkin, col. 4, lines 55-60).

Because neither Jiang nor Grunkin teaches or suggests the various elements of amended claim 12, amended claim 12 is allowable over Jiang and Grunkin. Furthermore, claims 13, 89-91, 93-99, 101-103, 118-119, 128, 129, and 173, which depend from amended claim 12, are allowable for at least the same reasons.

The office action further rejects claims 116-117 and 120-126 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,306,822 (Kumagai et al., hereinafter "Kumagai") in view of Jiang and Grunkin.

Claims 116-117 and 120-126 depend from claim 12, and include all the limitations of the base claim as well as any intervening claims. As previously noted, neither Jiang nor Grunkin, alone or in combination, anticipates or renders obvious amended claim 12, and this deficiency is not remedied by the addition of Kumagai. Kumagai teaches a phosphopeptide and a method of treating bone disease using the phosphopeptide. Because Kumagai does not teach or suggest the various elements of amended claim 12, amended claim 12 is allowable over Kumagai, Jiang and Grunkin. As dependent claims of amended claim 12, claims 116-117 and 120-126 include the limitations of amended independent claim 12. Therefore, claims 116-117 and 120-126 are allowable over the combination of Jiang, Grunkin and/or Kumagai, for at least the reasons discussed above with regard to amended claim 12.

The office action further rejects claims 92 and 104-105 under 35 U.S.C. 103(a) as being unpatentable over Jiang, in further view of Grunkin.

As dependent claims of amended claim 12, claims 92 and 104-105 include the limitations of amended independent claim 12. Therefore, claims 92 and 104-105 are allowable over Jiang and Grunkin, both alone and in combination, for at least the reasons discussed above with regard to amended claim 12.

CONCLUSION

It is believed that the application is now in order for allowance and Applicant respectfully requests that a notice of allowance be issued. Applicant believes that a three month extension of time is required and hereby requests that the associated fee be charged to account number 19-4972. Additionally, please charge any additional fees required by this paper or credit any overpayment to deposit account number 19-4972. Applicant also requests that the examiner contact applicant's attorney, Jonathan Lovely, if it will assist in processing this application through issuance.

DATE: June 28, 2011
Sunstein, Kann, Murphy & Timbers, LLP
125 Summer Street
Boston, MA 02110-1618
(617) 443-9292

Respectfully submitted,
/Jonathan C. Lovely, #60,821/
Jonathan C. Lovely
Registration No. 60,821
Attorney for Applicant

03155/00119 1478724.1